

REMARKS

Claims 1 to 19 are currently pending and under consideration. With this Amendment, Claims 1 to 19 have been canceled without prejudice or disclaimer and replaced with Claims 20 to 46. The correspondence between the cancelled and new claims is provided in Table 1, below. The subject matter of the canceled claims is recited in the new claims as discussed below. After entry of this Amendment, Claims 20 to 46 are pending and under consideration. The newly added claims and the rejections of Claims 1-19 are addressed in detail below.

The Amendments of the Claims

Claims 1 to 19 have been canceled. New independent Claims 20 and 41 are drawn to wafer surface characterization and chemical mechanical polishing methods, respectively, and independent Claim 26 is drawn to a CMP apparatus that are disclosed in the original specification. Support for new Claims 20 to 46 can be found throughout the original specification and claims as originally filed, and in particular at the exemplary pages and line numbers and/or original claim numbers indicated in Table 1, below.

As new Claims 20 to 46 are fully supported by the original disclosure and claims, they do not introduce new matter. Entry thereof into the instant application is therefore requested.

Table 1

New Claim	Original Claim	Support for New Claims (Page:Lines)
20		43: 3-12, 43:24-27, 48: 10-26
21		43: 21-23
22		43: 15-16
23		43: 20-21
24		43: 20-21
25		43: 13-15
26	1	43: 3-12, 43:24-27, 48: 10-26
27		43: 15-16
28	2	
29	3	
30	4	
31	5	
32	6	
33	7	
34	8	
35	9	
36	10	
37	11	
38	12	
39	13	
40		43: 13-15
41	14	48: 10-26
42	15	
43		48: 10-26
44	17	
45	18	48: 10-26
46	19	48: 10-26

Obviousness-Type Double Patenting Claim Rejections

Claims 1, 2, and 4-13 stand rejected under the judicially created doctrine of obviousness-type double patenting as being allegedly unpatentable over Claims 1 to 11 of U.S. Patent No. 6,476,921. Original independent Claim 1 has been canceled and replaced with Claim 26 which includes additional limitations regarding the structure and operation of the claimed CMP apparatus that are neither anticipated nor obvious in light of the claims of U.S. Patent No. 6,476,921. New Claims 27-39 depend from and include the limitations of Claim 26 and are

therefore also non-obvious over U.S. Patent No. 6,476,921. As such, Applicant requests that this rejection be withdrawn.

Claims 14 to 19 stand rejected under 35 U.S.C. § 101 as allegedly claiming the same invention as Claims 12 to 17 of U.S. Patent No. 6,476,921. Original Claim 14 has been canceled and replaced by new independent Claim 41. Applicant submits that the limitations regarding characterizing the surface condition in the localized zones that are recited in Claim 41 render it patentably distinct from Claim 14 of U.S. Patent No. 6,476,921 and requests that this rejection be withdrawn.

Claim Rejections under 35 U.S.C. § 103(a)

Claims 1 to 3 and 11 to 13 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 6,071,177 to Lin et al. ("Lin") in view of U.S. Patent No. 6,290,584 to Kim et al. ("Kim").

Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Lin in view of Kim, and further in view of U.S. Patent No. 5,923,408 to Takabayashi ("Takabayashi"). Applicant has assumed that the reference to "Watson ('211) at the top of page 5 of the pending office action is in error as no patent to Watson is of record and no further reference is made to Watson in the discussion of the rejection.

Claims 7 to 10 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Lin in view of Kim, and further in view of U.S. Patent No. 6,204,922 to Chalmers ("Chalmers").

Applicant traverses all of the pending rejections under 35 U.S.C. § 103(a) noting that no proper *prima facie* case for obviousness may be established based on the cited references in light of the amendments to the claims. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. (MPEP § 2143). None of the cited references teaches or otherwise suggests that the wafer and platen rotate independently on separate axes with different angular velocities such that a sensor on the platen scans the wafer in a pattern of a plurality of loci. Independent Claims 20, 26, and 41 and the remaining pending claims which depend therefrom each include these limitations and are thus patentable over the cited prior art.

Conclusion

Based on the foregoing, Applicants respectfully submit that Claims 20 to 46 are in condition for allowance. An early indication of the same is therefore kindly requested. If any matters can be resolved by telephone, the Examiner is invited to call the undersigned agent at the telephone number listed below. No fees beyond those included with the Amendment are believed due. However, the Commissioner is authorized to charge any additional required fees, or credit any overpayment, to Dorsey & Whitney LLP Deposit Account No. 50-2319 (Order No. A-69174-1/MSS/MDV (463035-29)).

Respectfully submitted,



Michael D. Van Loy

Reg. No. 52,315

DORSEY & WHITNEY LLP
Suite 3400, 4 Embarcadero Center
San Francisco, CA 94111-4187
Telephone: (650) 494-8700